



DuPont Polymers

TED014

Revised 14-MAY-2004

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## "TEDLAR" PVF TRANSPARENT FILMS ALL ON SYNONYM LIST TED014

### CHEMICAL PRODUCT/COMPANY IDENTIFICATION

#### Material Identification

"TEDLAR" is a registered trademark of DuPont.

#### Tradenames and Synonyms

"TEDLAR" PVF FILM  
"TEDLAR" TRANSPARENT FILM  
"TEDLAR" TTR10AG3, TTR10BG3, TTR10SG3  
"TEDLAR" TTR15AG5, TTR15BG5, TTR15SG5  
"TEDLAR" TTR20AG4, TTR20BG4, TTR20SG4  
"TEDLAR" TST20AG4, TST20BG4, TST20SG4

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#### Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont  
Fluoroproducts  
1007 Market Street  
Wilmington, DE 19898

#### PHONE NUMBERS

Product Information	1-800-441-7515
Transport Emergency	1-800-424-9300
Medical Emergency	1-800-441-3637

### COMPOSITION/INFORMATION ON INGREDIENTS

#### Components Material

CAS Number %

POLYVINYL FLUORIDE POLYMER	24981-14-4	>98
EPOXY RESIN	25036-25-3	1
DIMETHYLACETAMIDE (DMAC)	127-19-5	<0.5

Heated above 400 deg. F (204 deg. C) can evolve:

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**COMPOSITION/INFORMATION ON INGREDIENTS**(Continued)

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7664-39-3

Hydrogen Fluoride as a degradation product

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**Components (Remarks)**

Material is not known to contain Toxic Chemicals under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

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**HAZARDS IDENTIFICATION****Potential Health Effects****ADDITIONAL HEALTH EFFECTS**

No information found for "Tedlar" film or polyvinyl fluoride polymer. "Tedlar" PVF film is not hazardous as shipped. <1% DMAC may be released when the film is heated to processing temperatures. At temperatures above 400 degrees F (204 degrees C) or on prolonged heating small amounts of hydrogen fluoride will be generated.

**HUMAN HEALTH EFFECTS OF OVEREXPOSURE TO HYDROGEN FLUORIDE**

Inhalation of low concentrations of HYDROGEN FLUORIDE can initially include symptoms of choking, coughing, and severe eye, nose, and throat irritation. Possibly followed after a symptomless period of 1 to 2 days by fever, chills, difficulty in breathing, cyanosis, and pulmonary edema. Acute or chronic overexposure to HF can injure the liver and kidneys.

Individuals with preexisting diseases of the lungs may have increased susceptibility to the toxicity of excessive exposures from hydrogen fluoride.

**DIMETHYL ACETAMIDE**

Human health effects of overexposure by skin contact may include slight irritation with itching, redness or swelling. There are no reports of human sensitization. Skin permeation may occur in amounts capable of producing the effects of systemic toxicity.

Eye contact may cause eye irritation with tearing, pain or blurred vision.

Short-term overexposure by inhalation, ingestion or skin contact may cause non-specific effects such as nausea, headache, dizziness, drowsiness, and weakness. Repeated or excessive over-exposure may cause altered liver function or abdominal pain, vomiting or jaundice; abnormal kidney function with altered results on blood tests.

Individuals with preexisting diseases of the liver or kidneys may

(Continued)



## HAZARDS IDENTIFICATION (Continued)

have increased susceptibility to the effects of this material.

### Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

## FIRST AID MEASURES

### First Aid

#### INHALATION

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult a physician if necessary.

If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.

#### SKIN CONTACT

The compound is not likely to be hazardous by skin contact but cleansing the skin after use is advisable.

#### EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

Not a probable route of exposure for "TEDLAR" film.

#### INGESTION

No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Consult a physician if necessary.

## FIRE FIGHTING MEASURES

### Flammable Properties

Hazardous gases/vapors produced in fire are hydrogen fluoride and carbon monoxide.

"Tedlar" does not readily burn or support combustion.

"Tedlar" will not contribute significantly to the danger associated with fire in a residential or industrial structure because the volume of carbon monoxide and other gases produced in a fire will present a greater hazard than the volume of carbon monoxide and hydrogen fluoride produced by this film.

### Extinguishing Media

Foam, Dry Chemical, CO2, Water.

### Fire Fighting Instructions

Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment.

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## ACCIDENTAL RELEASE MEASURES

### Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

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### Accidental Release Measures

Sweep up to avoid slipping hazard.

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## HANDLING AND STORAGE

### Handling (Personnel)

See FIRST AID and PROTECTION INFORMATION sections.

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## EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls

VENTILATION Use local exhaust to remove vapors and fumes liberated during hot processing from the work area and maintain concentrations below permissible exposure limits.

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### Personal Protective Equipment

EYE/FACE PROTECTION  
Wear Safety glasses.

#### RESPIRATORS

When temperatures exceed 204 degrees C (400 deg F) and ventilation is inadequate to maintain concentrations below exposure limits, use a positive pressure air supplied respirator. Air purifying respirators may not provide adequate protection.

During grinding, sanding, or sawing operations use a NIOSH/MSHA approved air purifying respirator with dust/mist cartridge or canister if airborne particulate concentrations are expected to exceed permissible exposure levels.

#### PROTECTIVE CLOTHING

If there is potential contact with hot/molten material, wear heat resistant clothing and footwear.

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### # Exposure Guidelines

#### Applicable Exposure Limits

##### DIMETHYLACETAMIDE (DMAC)

PEL (OSHA)	10 ppm, 35 mg/m <sup>3</sup> , 8 Hr. TWA, Skin
TLV (ACGIH)	10 ppm, 36 mg/m <sup>3</sup> , 8 Hr. TWA, Skin, A4
AEL * (DuPont)	10 ppm, 8 & 12 Hr. TWA, Skin

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##### Hydrogen Fluoride as a degradation product

PEL (OSHA)	3 ppm, 8 Hr. TWA, as F
TLV (ACGIH)	3 ppm, 2.6 mg/m <sup>3</sup> , Ceiling as F
	Notice of Intended Changes (2004)
	0.5 ppm, 8 Hr. TWA, as F
	Ceiling 2 ppm, as F
AEL * (DuPont)	3 ppm, 15 minute TWA

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\* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

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## PHYSICAL AND CHEMICAL PROPERTIES

### Physical Data

Solubility in Water	NOT SOLUBLE
Odor	Odorless.
Form	Film.
Density	1.38

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## STABILITY AND REACTIVITY

### Chemical Stability

Stable at normal temperatures and storage conditions.

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### Incompatibility with Other Materials

None reasonably foreseeable.

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### Decomposition

Decomposes with heat.

Decomposition temperature 204 C (399 F)

Hazardous gases/vapors produced are carbon monoxide and hydrogen fluoride

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### Polymerization

Polymerization will not occur.

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## ECOLOGICAL INFORMATION

### Ecotoxicological Information

Aquatic Toxicity

No data available. Toxicity expected to be low because of negligible solubility in water.

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## DISPOSAL CONSIDERATIONS

### Waste Disposal

Preferred option for disposal is landfill. Incinerate only if incinerator is capable of scrubbing out hydrogen fluoride and other acidic combustion products. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

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## TRANSPORTATION INFORMATION

### Shipping Information

DOT	
Proper Shipping Name	NA
Hazard Class	Not regulated

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## REGULATORY INFORMATION

### U.S. Federal Regulations

TSCA Inventory Status

In compliance with TSCA Inventory requirements for commercial purposes.

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## OTHER INFORMATION

### Additional Information

MEDICAL USE: CAUTION: Do not use in medical applications involving permanent implantation in the human body. For other medical applications see DuPont CAUTION Bulletin No. H-50102.

### STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet.

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.01% FOR SPECIAL HAZARDOUS SUBSTANCES): None known.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): None known.

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS  
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# Indicates updated section.

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End of MSDS